**CSS3**

* CSS3 is the latest standard of css which includes latest features and modules

**Content**

* **Fonts**
  + **Adding a new font**
  + @font-face {  
     font-family : customFont; src:url('https://fonts.gstatic.com/s/bungee/v2/86NbnFpNqZ2MU9Gl0ca2YQ.woff2') format('woff2')  
    }
  + **Using a new font**
  + body {  
     font-family : customFont;  
    }
* **Text shadow**
  + div {  
     text-shadow : 2px /\* horizontal \*/  
     2px /\* vertical \*/  
     4px /\* blur \*/  
     #000000; /\* color of shadow \*/  
    }
* **Selectors**
  + first-child
    - #cntr p:first-child { background-color : red; }
  + last-child
    - #cntr p:last-child { background-color : red; }
  + nth-child
    - #cntr p:nth-child(1) { background-color : red; }
    - #cntr p:nth-child(2n) { background-color: #FF00FF; }  
      Applies bg color for every second element  
        
      #cntr p:nth-child(2n-1) { background-color: #FF0000; }  
      Applies different color to other elements
  + ::selection
    - Used to change the text selection colors
    - ::selection {  
       background-color: #000;  
       color:#FF0000;  
       }
  + :root
    - Applies to the entire webpage
  + :required
    - :required { background-color: #000; }
  + Placeholder
    - :valid::-webkit-input-placeholder {  
       color:darkorchid;  
       font-style: italic  
      }  
        
      :invalid::-webkit-input-placeholder {  
       color:red;  
       font-style: italic;  
      }
  + :optional
    - :not([type=submit]):optional {  
       border-style: dashed  
      }
* **Vendor Prefixes**
  + To support the properties specific for each browser
  + -webkit
  + -moz
  + -ms
* **Columns**
  + column-count & column-gap
    - #cntr2 ul   
       -webkit-column-count: 3;  
       column-count: 3;  
       -webkit-column-gap: 0;  
       column-gap: 0;  
      }
* **Multiple background images**
  + #cntr {  
     background: url(http://www.squarebikes.net/wp-content/uploads/2016/03/CROSSTOWN-26-1.3-16-BLK.jpg) bottom left,   
     url(https://media.zigcdn.com/media/content/2016/Feb/bike-of-the-year-pulsar-rs200-m\_720x540.jpg) bottom right,  
     #CCCCCC;  
     background-repeat: no-repeat;  
     }

**Colors**

* Opacity
  + #cntr:hover {  
     opacity: 0.75;  
    }
* currentColor
  + #cntr {  
     color: #FF0000;  
     border: 1px solid currentColor;  
    }

**Borders :**

* border-radius : 20px;
* Border-radius : 10px 20px 30px 40px;
* Resize
  + Values => both, none, horizontal, vertical
  + #cntr2 {  
     border: 1px solid #000;  
     resize: both;  
     overflow: auto;  
     max-width: 600px;  
     max-height: 400px;  
     }
* Rounded corners
  + border-radius : 5px;
  + border-top-left-radius: 5px;  
    border-top-right-radius: 5px;  
    border-bottom-left-radius: 5px;  
    border-bottom-right-radius: 5px;
* Box shadow
  + box-shadow: horizontal\_offset vertical\_offet blur\_effect all\_sides color
  + box-shadow: 5px 5px 20px 20px #CCC;

**Text :**

* Text-overflow :ellipsis, clip
  + white-space: nowrap; width: 150px; overflow: hidden;text-overflow: ellipsis; border: 1px solid #000000;
* word-break: break-all, keep-all,
* Word-wrap : break-word

**Transform**

* **Translate** : move element from current position with respective to values specified for x and y axis
  + translate(x,y)
  + <div style="transform: translate(50px,100px);width:250px;height:150px;background-color:yellow;padding:5px;">Translate methode demo</div>
* **Rotate :** rotates element clockwise / counter clockwise with respect to degree specified
  + rotate(n deg). -ve value for counter clockwise
  + <div style="transform:rotate(20deg);width:250px;height:150px;background-color:red;padding:5px;">Rotate method demo</div>
* **Scale :** changes size of an element for given width, height
  + scale(width, height)
  + <div style="transform:scale(1,2); width : 250px; height:150px; background-color:red;margin:100px;">Scale method demo </div>
* **Skew :** skews an element along x/y axis by given angle
  + **skewX() :**
  + <div style="width:250px;height:150px;background-color:green;transform:skewX(30deg)">SkewX method</div>
  + **SkewY():**
  + <div style="width:250px;height:150px;background-color:green;transform:skewY(30deg)">SkewY method</div>
  + **Skew();**
  + <div style="width:250px;height:150px;background-color:green;transform:skew(10deg, 20deg)">Skew method</div>
  + **Matrix :** combines all transform method into one methode
    - matrix(scaleX(), skewY(), skewX(), scaleY(), translateX(), translateY());

**Transitions**

Can add a delay on while the transition is happening.

Can we pick the item which we need to add in the delay.

#transCntr {

transition: background, padding 2s;

/\* transition: all 2s;\*/

}

#transCntr:hover {

padding:10px;

background: red;

}

**Animations :**

* Using CSS3 you can create animation without the help of javascript
* **@keyframes :** specify all animation rules here and need to bind the animation rules to the element on which the animation has to apply
* **Animation-name:** for binding animation rules to the element
* **Animation-duration :** duration in which the animation has to comp
* **When to change animation :** you can specify when to change animation using keywords **from, to** or you can specify using **percentage**
  + @keyframes newAnimate {  
     from {background:red;}  
     to {background:yellow;}  
    }  
    @keyframes newAnimatePercent{  
     0% {background:red;}  
     25% {background:green;}  
     50% {background:cyan;}  
     75% {background:yellow;}  
     100% {background:black; color:white;}  
    }  
    #animateCntr {  
     padding: 10px;  
     -webkit-animation: newAnimate 10s infinite alternate; // runs the animation indefinitely and once it reaches the end it will go on the reverse order  
    }

**Media Queries**

* CSS3 introduced media queries which gives the flexibility to write different styles for different devices
* Syntax
  + @media screen and (max-width: 600px) {  
     div {  
     background-color: blue;  
     color : white;  
     }  
    }  
    @media screen and (min-width: 600px) and max-width(900px) {  
     div {  
     background-color: black;  
     color : white;  
     }  
    }
  + The above example will change the background-color and text color of the div when the size of the viewport changes to 480px or higher